# Introduction to CD-ROM

Keith Jordan
Whole Earth Catalog & Review
27 Gate Five Road
Sausalito, CA 94965
332-1716

CD-ROM is one of several ways of formatting information on the medium of the Compact Disc. (others include CD-WORM, CD-I, DVI, and of course the now ubiquitous audio CD's).

CD-ROM stands for "Compact Disc - Read Only Memory." This means that the disc has the information pressed onto it like an LP or audio CD and this info cannot be changed by the user.

CD-WORM allows the user to "Write Once" to a disc and "Read Many" times what has been saved there. CD-I and DVI (which are not yet available) promise to allow CD's to include "real time" interactive video (which CD-ROM cannot accomodate).

CD-ROM is basically equal to a very large "Read Only" floppy disk. Access time is faster than a floppy disk and slower than a hard disk.

One CD-ROM holds approximately 550 Megabytes of information This is equal to approximately:

- 700 DSDD Macintosh floppy disks
- 150,000 printed pages (enough to fill 250 big books)
- sharp images of 15,000 pages of documents
- 14 hours of decent quality digitized mono sound

A special CD-ROM disk drive is required (some CD-ROM drives can play audio CD's, but not vice-versa) The price range for these drives is begins at $800.

"High Sierra" is the name of the standard format adopted for information stored on CD-ROM. This only applies to "plain vanilla" type information - basically the same kind of ASCII files you can send over a modem from one computer to another. (Apple's CD-ROM drive still does not read High Sierra Discs, though this is promised soon.)

If a CD-ROM wants to make use of Apple's HyperCard program as the base from which to display information, then the only people who will be able to use the CD are those with a Macintosh and a Mac compatible CD player.

With HyperCard it is possible to include text, graphics and sound all in one package on CD-ROM.

Most publishing uses of CD-ROM currently fall into two categories:

- "Vertically targetted" products:
  expensive, with a small and specific market
- Library products

Most of what is being put on CD right now is rather like a magazine publisher doing a simple reprint series of books made up of previously published articles: Publishers are taking already existing large databases and text files and dumping them onto CD-ROM.

This kind of "pour it all in" publishing is pretty easy (and relatively inexpensive). Actually tailoring the information to an electronic format is the hard part (and can be very expensive).